

Power Supply Procurement Plan 2024



**BOHOL II ELECTRIC COOPERATIVE, INC.
[BOHECO II]**

GAUS ISLAND

Historical Consumption Data

Bohol II Electric Cooperative, Inc. (BOHECO II) and National Power Corporation (NPC) had an existing supply contract with a term from 26 March 2021 to 25 December 2023 to supply Cabulan Island. With existing distribution lines, Gaus Island with six (6) other new areas were included in the existing contract through Board Resolution No. 87 Series of 2022 titled: "*A Resolution requesting for the inclusion of seven (7) new areas to the existing PSA between NPC and BOHECO II*", with effectiveness term of 26 June 2022 to 25 December 2023.

The construction of distribution lines in Gaus Island was completed in January of 2021. However, due to typhoon Odette the lines were damaged and were only restored in the final quarter of 2022. Furthermore, the energization of the island faced a setback due to delays in obtaining the Certificate of Compliance (COC) from the Energy Regulatory Commission, hindering NPC's ability to proceed with the necessary power supply.

The contract with NPC is scheduled for renewal, now extending over a ten-year term from December 26, 2023, to December 25, 2033. Notably, this renewal will be executed without the inclusion of the energization component for the island, reflecting the prevailing challenges in obtaining the required regulatory approvals.

Forecasted Consumption Data

		Coincident Peak MW	Contracted MW	Pending MW	Planned MW	Retail Electricity Suppliers MW	Existing Contracting Level	Target Contracting Level	MW Surplus / Deficit
2024	Jan	0.042	0.042	0.000	0.000		100%	100%	0.000
	Feb	0.040	0.039	0.000	0.000		98%	98%	-0.001
	Mar	0.043	0.043	0.000	0.000		100%	100%	0.000
	Apr	0.044	0.044	0.000	0.000		100%	100%	0.000
	May	0.045	0.045	0.000	0.000		100%	100%	0.000
	Jun	0.048	0.048	0.000	0.000		100%	100%	0.000
	Jul	0.043	0.043	0.000	0.000		100%	100%	0.000
	Aug	0.044	0.043	0.000	0.000		98%	98%	-0.001
	Sep	0.043	0.043	0.000	0.000		100%	100%	0.000
	Oct	0.043	0.043	0.000	0.000		100%	100%	0.000
	Nov	0.044	0.044	0.000	0.000		100%	100%	0.000
	Dec	0.042	0.042	0.000	0.000		100%	100%	0.000
2025	Jan	0.042	0.043	0.000	0.000		102%	102%	0.001
	Feb	0.040	0.041	0.000	0.000		103%	103%	0.001
	Mar	0.043	0.044	0.000	0.000		102%	102%	0.001
	Apr	0.045	0.045	0.000	0.000		100%	100%	0.000
	May	0.046	0.047	0.000	0.000		102%	102%	0.001
	Jun	0.049	0.050	0.000	0.000		102%	102%	0.001
	Jul	0.043	0.044	0.000	0.000		102%	102%	0.001
	Aug	0.044	0.045	0.000	0.000		102%	102%	0.001
	Sep	0.043	0.044	0.000	0.000		102%	102%	0.001
	Oct	0.044	0.044	0.000	0.000		100%	100%	0.000
	Nov	0.045	0.046	0.000	0.000		102%	102%	0.001
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	Feb	0.041	0.042	0.000	0.000		102%	102%	0.001
	Mar	0.044	0.045	0.000	0.000		102%	102%	0.001
	Apr	0.046	0.047	0.000	0.000		102%	102%	0.001
	May	0.047	0.048	0.000	0.000		102%	102%	0.001

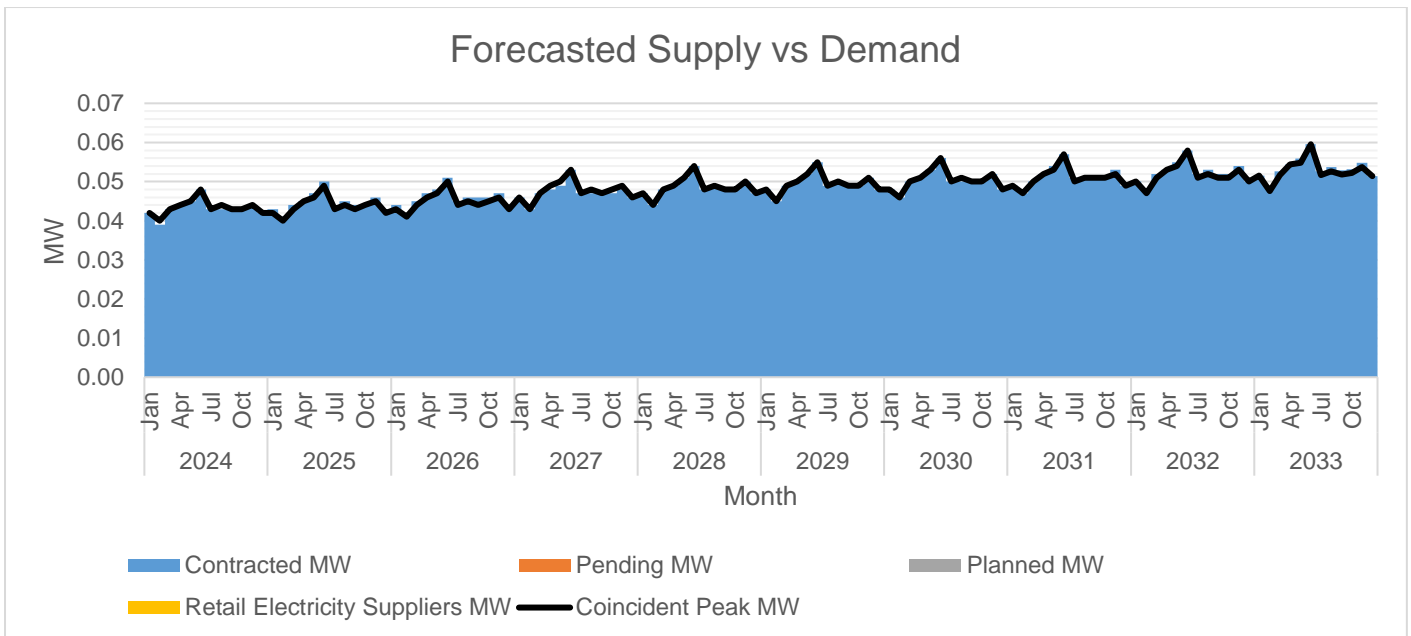
	Jun	0.050	0.051	0.000	0.000		102%	102%	0.001
	Jul	0.044	0.045	0.000	0.000		102%	102%	0.001
	Aug	0.045	0.046	0.000	0.000		102%	102%	0.001
	Sep	0.044	0.046	0.000	0.000		105%	105%	0.002
	Oct	0.045	0.046	0.000	0.000		102%	102%	0.001
	Nov	0.046	0.047	0.000	0.000		102%	102%	0.001
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2027	Jan	0.046	0.046	0.000	0.000		100%	100%	0.000
	Feb	0.043	0.043	0.000	0.000		100%	100%	0.000
	Mar	0.047	0.047	0.000	0.000		100%	100%	0.000
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	Oct	0.048	0.047	0.000	0.000		98%	98%	-0.001
	Nov	0.049	0.048	0.000	0.000		98%	98%	-0.001
	Dec	0.046	0.046	0.000	0.000		100%	100%	0.000
2028	Jan	0.047	0.047	0.000	0.000		100%	100%	0.000
	Feb	0.044	0.044	0.000	0.000		100%	100%	0.000
	Mar	0.048	0.048	0.000	0.000		100%	100%	0.000
	Apr	0.049	0.049	0.000	0.000		100%	100%	0.000
	May	0.051	0.051	0.000	0.000		100%	100%	0.000
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	Sep	0.048	0.048	0.000	0.000		100%	100%	0.000
	Oct	0.048	0.048	0.000	0.000		100%	100%	0.000
	Nov	0.050	0.050	0.000	0.000		100%	100%	0.000
	Dec	0.047	0.047	0.000	0.000		100%	100%	0.000
2029	Jan	0.048	0.048	0.000	0.000		100%	100%	0.000
	Feb	0.045	0.045	0.000	0.000		100%	100%	0.000
	Mar	0.049	0.049	0.000	0.000		100%	100%	0.000

	Apr	0.050	0.050	0.000	0.000		100%	100%	0.000
	May	0.052	0.052	0.000	0.000		100%	100%	0.000
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	Sep	0.049	0.049	0.000	0.000		100%	100%	0.000
	Oct	0.049	0.049	0.000	0.000		100%	100%	0.000
	Nov	0.051	0.051	0.000	0.000		100%	100%	0.000
	Dec	0.048	0.048	0.000	0.000		100%	100%	0.000
2030	Jan	0.048	0.048	0.000	0.000		100%	100%	0.000
	Feb	0.046	0.046	0.000	0.000		100%	100%	0.000
	Mar	0.050	0.050	0.000	0.000		100%	100%	0.000
	Apr	0.051	0.051	0.000	0.000		100%	100%	0.000
	May	0.053	0.053	0.000	0.000		100%	100%	0.000
	Jun	0.056	0.056	0.000	0.000		100%	100%	0.000
	Jul	0.050	0.050	0.000	0.000		100%	100%	0.000
	Aug	0.051	0.050	0.000	0.000		98%	98%	-0.001
	Sep	0.050	0.050	0.000	0.000		100%	100%	0.000
	Oct	0.050	0.050	0.000	0.000		100%	100%	0.000
	Nov	0.052	0.052	0.000	0.000		100%	100%	0.000
	Dec	0.048	0.048	0.000	0.000		100%	100%	0.000
2031	Jan	0.049	0.049	0.000	0.000		100%	100%	0.000
	Feb	0.047	0.047	0.000	0.000		100%	100%	0.000
	Mar	0.050	0.050	0.000	0.000		100%	100%	0.000
	Apr	0.052	0.052	0.000	0.000		100%	100%	0.000
	May	0.053	0.054	0.000	0.000		102%	102%	0.001
	Jun	0.057	0.057	0.000	0.000		100%	100%	0.000
	Jul	0.050	0.051	0.000	0.000		102%	102%	0.001
	Aug	0.051	0.051	0.000	0.000		100%	100%	0.000
	Sep	0.051	0.051	0.000	0.000		100%	100%	0.000
	Oct	0.051	0.051	0.000	0.000		100%	100%	0.000
	Nov	0.052	0.053	0.000	0.000		102%	102%	0.001
	Dec	0.049	0.049	0.000	0.000		100%	100%	0.000
2032	Jan	0.050	0.050	0.000	0.000		100%	100%	0.000

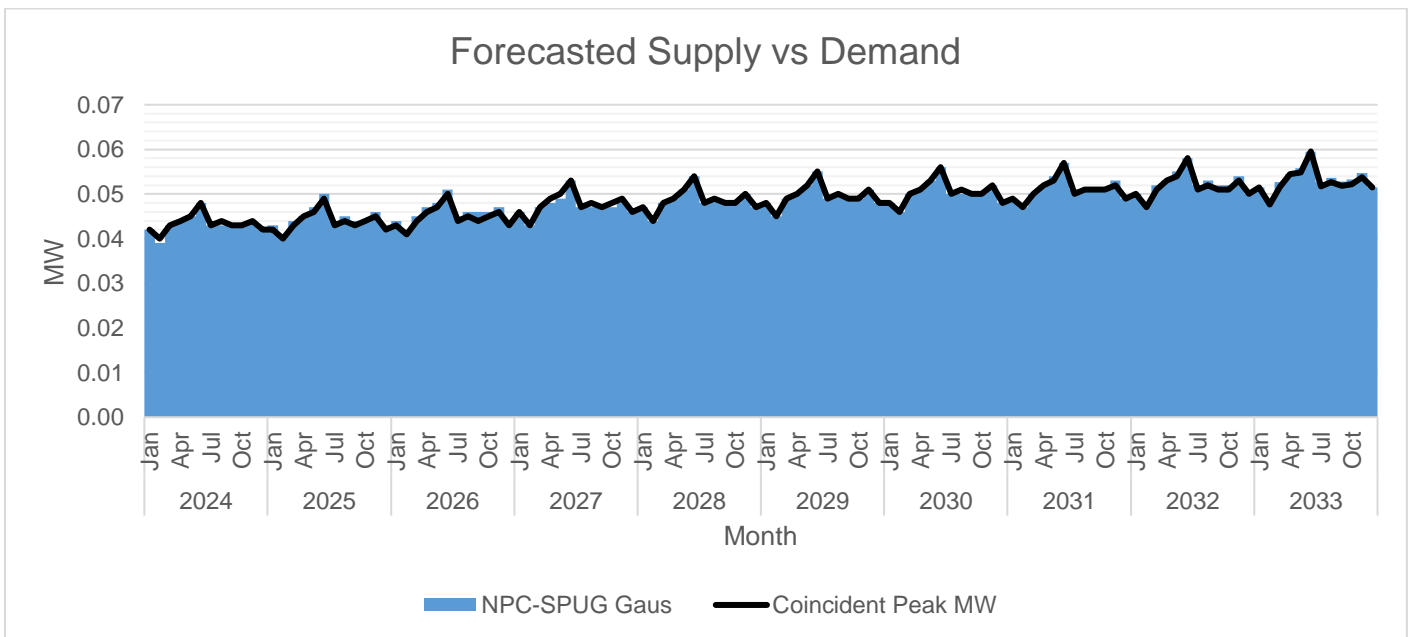
	Feb	0.047	0.048	0.000	0.000		102%	102%	0.001
	Mar	0.051	0.052	0.000	0.000		102%	102%	0.001
	Apr	0.053	0.053	0.000	0.000		100%	100%	0.000
	May	0.054	0.055	0.000	0.000		102%	102%	0.001
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	Jul	0.051	0.052	0.000	0.000		102%	102%	0.001
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	Oct	0.051	0.052	0.000	0.000		102%	102%	0.001
	Nov	0.053	0.054	0.000	0.000		102%	102%	0.001
	Dec	0.050	0.050	0.000	0.000		100%	100%	0.000
2033	Jan	0.051	0.051	0.000	0.000		100%	100%	0.000
	Feb	0.048	0.049	0.000	0.000		102%	102%	0.001
	Mar	0.052	0.053	0.000	0.000		102%	102%	0.001
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	May	0.055	0.056	0.000	0.000		102%	102%	0.001
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	Aug	0.053	0.054	0.000	0.000		102%	102%	0.001
	Sep	0.052	0.053	0.000	0.000		102%	102%	0.001
	Oct	0.052	0.053	0.000	0.000		102%	102%	0.001
	Nov	0.054	0.055	0.000	0.000		102%	102%	0.001
	Dec	0.051	0.051	0.000	0.000		100%	100%	0.000

Forecasting of Peak Demand is determined by the quotient of forecasted energy and by the product of time (t) in year [8760 hours] and the system load factor. Furthermore, for the purpose of calculation, the system load factor was assumed to vary from 53% to 73% in the next succeeding period of forecasting based on its historical trend in the previous year.

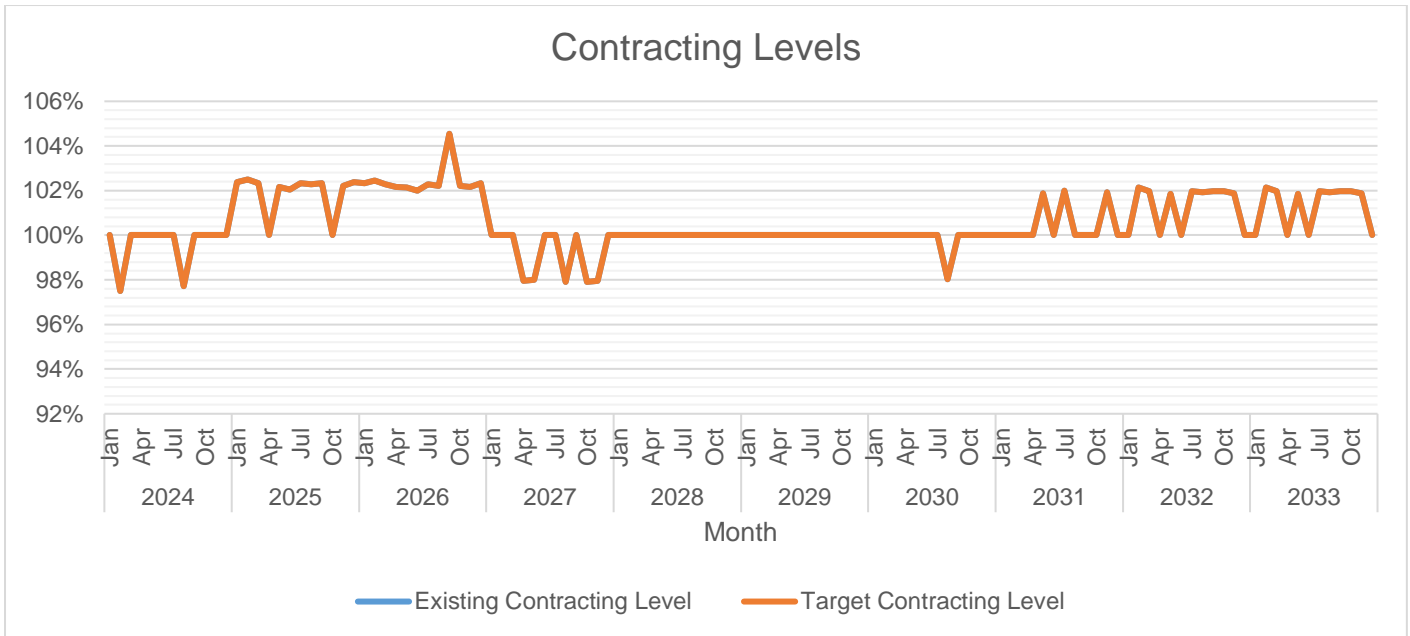
The Peak Demand was assumed to occur in the month of June. Monthly Peak Demand is at its lowest on the month of February. In general, Peak Demand is expected to grow at an average rate of 3% annually.



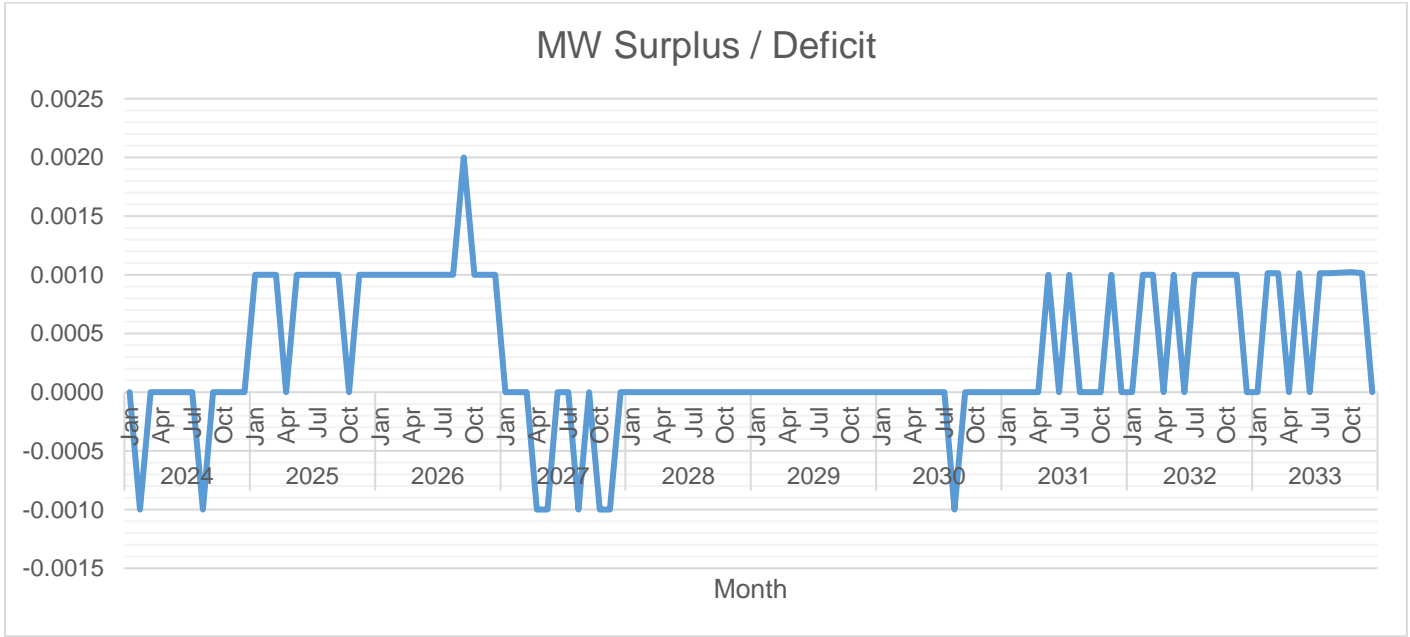
The available supply is generally above the Peak Demand. This is because the expected total capacity installed of the diesel generator is 0.050MW, higher than the Peak Demand.



The available supply that ranges from 0.039 MW to 0.060 MW will solely come from NPC's Gaus Diesel Power Plant.



The highest target contracting level is 105% which is expected to occur in September of 2026. The lowest target contracting level is 98% which is expected to occur in February of 2024.



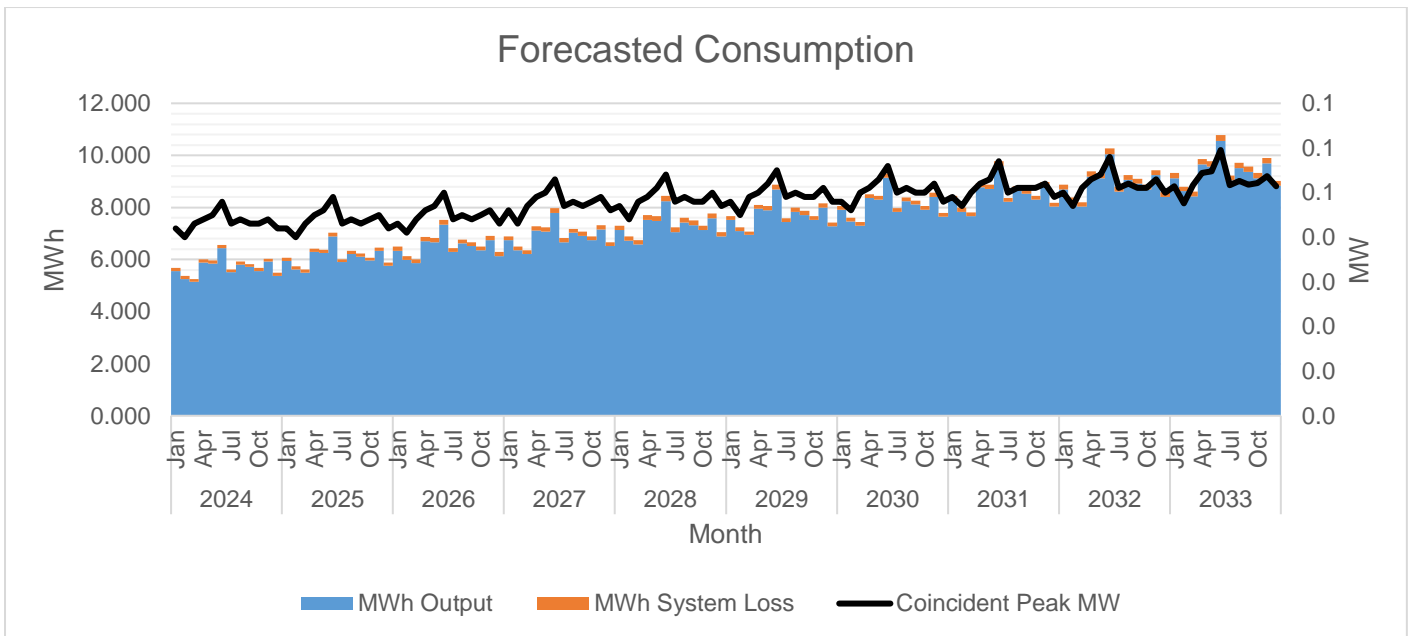
The highest surplus is 0.002 MW which is expected to occur in the month of September 2026. The lowest surplus is 0.001 MW which is expected to occur in the month of January 2025.

		MWh Offtake	MWh Output	MWh System Loss	Transm'n Loss	System Loss
2024	Jan	5.675	5.563	0.112	0.00%	1.97%
	Feb	5.361	5.256	0.106	0.00%	1.97%
	Mar	5.241	5.138	0.103	0.00%	1.97%
	Apr	5.999	5.881	0.118	0.00%	1.97%
	May	5.957	5.840	0.117	0.00%	1.97%
	Jun	6.565	6.436	0.129	0.00%	1.97%
	Jul	5.621	5.510	0.111	0.00%	1.97%
	Aug	5.916	5.799	0.117	0.00%	1.97%
	Sep	5.825	5.710	0.115	0.00%	1.97%
	Oct	5.677	5.566	0.112	0.00%	1.97%
	Nov	6.035	5.916	0.119	0.00%	1.97%
	Dec	5.490	5.381	0.108	0.00%	1.97%
2025	Jan	6.072	5.954	0.118	0.00%	1.95%
	Feb	5.737	5.625	0.112	0.00%	1.95%
	Mar	5.608	5.499	0.109	0.00%	1.95%
	Apr	6.419	6.294	0.125	0.00%	1.95%
	May	6.374	6.250	0.124	0.00%	1.95%
	Jun	7.025	6.888	0.137	0.00%	1.95%
	Jul	6.014	5.897	0.117	0.00%	1.95%
	Aug	6.330	6.206	0.123	0.00%	1.95%
	Sep	6.232	6.111	0.121	0.00%	1.95%
	Oct	6.075	5.957	0.118	0.00%	1.95%
	Nov	6.458	6.332	0.126	0.00%	1.95%
	Dec	5.874	5.759	0.114	0.00%	1.95%
2026	Jan	6.497	6.345	0.152	0.00%	2.35%
	Feb	6.138	5.994	0.144	0.00%	2.35%
	Mar	6.000	5.860	0.141	0.00%	2.35%
	Apr	6.868	6.707	0.161	0.00%	2.35%
	May	6.820	6.660	0.160	0.00%	2.35%
	Jun	7.516	7.340	0.176	0.00%	2.35%
	Jul	6.435	6.284	0.151	0.00%	2.35%
	Aug	6.773	6.614	0.159	0.00%	2.35%
	Sep	6.669	6.512	0.156	0.00%	2.35%
	Oct	6.500	6.348	0.153	0.00%	2.35%
	Nov	6.910	6.748	0.162	0.00%	2.35%
	Dec	6.285	6.137	0.147	0.00%	2.35%
2027	Jan	6.887	6.735	0.151	0.00%	2.20%
	Feb	6.507	6.364	0.143	0.00%	2.20%
	Mar	6.360	6.221	0.140	0.00%	2.20%
	Apr	7.280	7.120	0.160	0.00%	2.20%
	May	7.230	7.071	0.159	0.00%	2.20%
	Jun	7.967	7.792	0.175	0.00%	2.20%
	Jul	6.821	6.671	0.150	0.00%	2.20%
	Aug	7.179	7.021	0.158	0.00%	2.20%
	Sep	7.069	6.913	0.155	0.00%	2.20%
	Oct	6.890	6.739	0.152	0.00%	2.20%
	Nov	7.325	7.163	0.161	0.00%	2.20%
	Dec	6.662	6.516	0.147	0.00%	2.20%

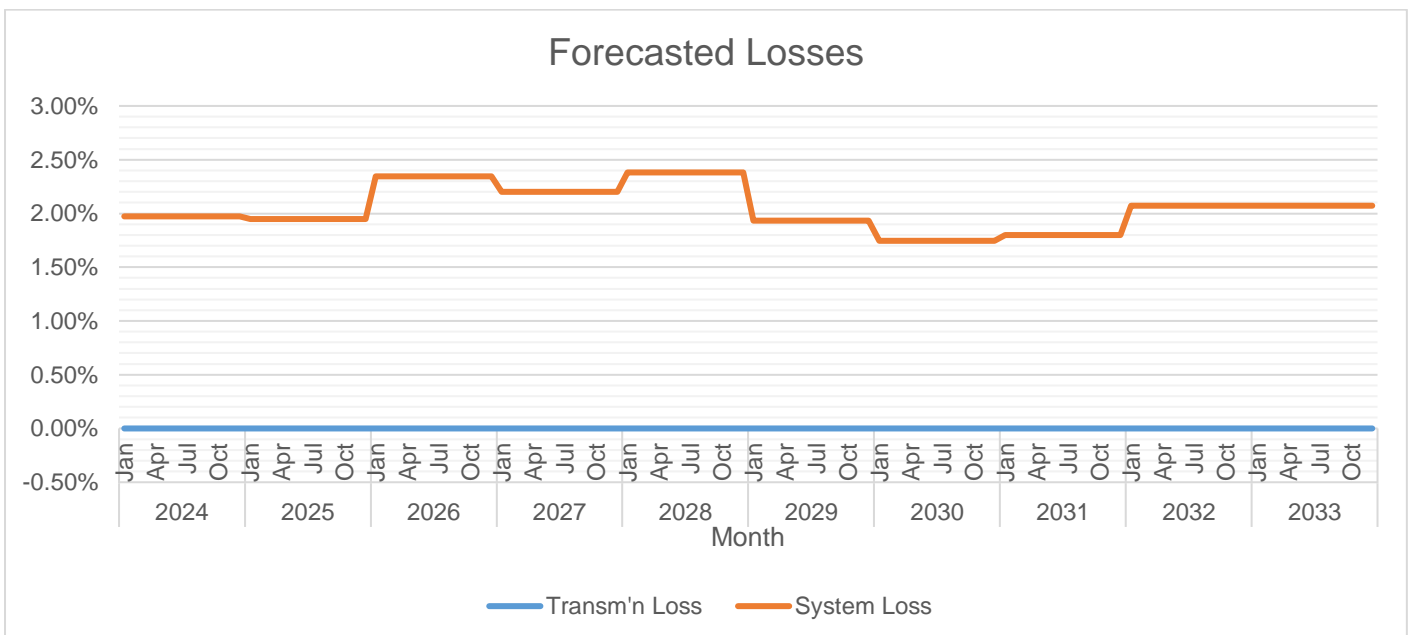
2028	Jan	7.300	7.126	0.174	0.00%	2.38%
	Feb	6.897	6.733	0.164	0.00%	2.38%
	Mar	6.742	6.581	0.161	0.00%	2.38%
	Apr	7.717	7.533	0.184	0.00%	2.38%
	May	7.663	7.481	0.183	0.00%	2.38%
	Jun	8.446	8.244	0.201	0.00%	2.38%
	Jul	7.231	7.059	0.172	0.00%	2.38%
	Aug	7.610	7.429	0.181	0.00%	2.38%
	Sep	7.493	7.315	0.178	0.00%	2.38%
	Oct	7.304	7.130	0.174	0.00%	2.38%
	Nov	7.764	7.579	0.185	0.00%	2.38%
	Dec	7.062	6.894	0.168	0.00%	2.38%
2029	Jan	7.665	7.517	0.148	0.00%	1.93%
	Feb	7.242	7.102	0.140	0.00%	1.93%
	Mar	7.079	6.942	0.137	0.00%	1.93%
	Apr	8.103	7.946	0.156	0.00%	1.93%
	May	8.047	7.891	0.155	0.00%	1.93%
	Jun	8.868	8.697	0.171	0.00%	1.93%
	Jul	7.592	7.446	0.147	0.00%	1.93%
	Aug	7.990	7.836	0.154	0.00%	1.93%
	Sep	7.868	7.716	0.152	0.00%	1.93%
	Oct	7.669	7.521	0.148	0.00%	1.93%
	Nov	8.152	7.995	0.157	0.00%	1.93%
	Dec	7.415	7.272	0.143	0.00%	1.93%
2030	Jan	8.048	7.908	0.140	0.00%	1.75%
	Feb	7.604	7.471	0.133	0.00%	1.75%
	Mar	7.433	7.303	0.130	0.00%	1.75%
	Apr	8.508	8.359	0.148	0.00%	1.75%
	May	8.449	8.301	0.147	0.00%	1.75%
	Jun	9.311	9.149	0.163	0.00%	1.75%
	Jul	7.972	7.833	0.139	0.00%	1.75%
	Aug	8.390	8.243	0.146	0.00%	1.75%
	Sep	8.261	8.117	0.144	0.00%	1.75%
	Oct	8.052	7.912	0.141	0.00%	1.75%
	Nov	8.560	8.410	0.149	0.00%	1.75%
	Dec	7.786	7.650	0.136	0.00%	1.75%
2031	Jan	8.451	8.299	0.152	0.00%	1.80%
	Feb	7.984	7.840	0.144	0.00%	1.80%
	Mar	7.805	7.664	0.140	0.00%	1.80%
	Apr	8.933	8.773	0.161	0.00%	1.80%
	May	8.871	8.712	0.160	0.00%	1.80%
	Jun	9.777	9.601	0.176	0.00%	1.80%
	Jul	8.370	8.220	0.151	0.00%	1.80%
	Aug	8.809	8.651	0.159	0.00%	1.80%
	Sep	8.674	8.518	0.156	0.00%	1.80%
	Oct	8.455	8.303	0.152	0.00%	1.80%
	Nov	8.988	8.826	0.162	0.00%	1.80%
	Dec	8.175	8.028	0.147	0.00%	1.80%
2032	Jan	8.873	8.689	0.184	0.00%	2.07%
	Feb	8.383	8.210	0.174	0.00%	2.07%
	Mar	8.195	8.025	0.170	0.00%	2.07%

	Apr	9.380	9.186	0.194	0.00%	2.07%
	May	9.315	9.122	0.193	0.00%	2.07%
	Jun	10.266	10.053	0.213	0.00%	2.07%
	Jul	8.789	8.607	0.182	0.00%	2.07%
	Aug	9.250	9.058	0.192	0.00%	2.07%
	Sep	9.108	8.919	0.189	0.00%	2.07%
	Oct	8.878	8.694	0.184	0.00%	2.07%
	Nov	9.437	9.242	0.195	0.00%	2.07%
	Dec	8.584	8.406	0.178	0.00%	2.07%
2033	Jan	9.317	9.124	0.193	0.00%	2.07%
	Feb	8.803	8.620	0.182	0.00%	2.07%
	Mar	8.605	8.426	0.178	0.00%	2.07%
	Apr	9.849	9.645	0.204	0.00%	2.07%
	May	9.781	9.578	0.203	0.00%	2.07%
	Jun	10.779	10.556	0.223	0.00%	2.07%
	Jul	9.228	9.037	0.191	0.00%	2.07%
	Aug	9.712	9.511	0.201	0.00%	2.07%
	Sep	9.563	9.365	0.198	0.00%	2.07%
	Oct	9.321	9.128	0.193	0.00%	2.07%
	Nov	9.909	9.704	0.205	0.00%	2.07%
	Dec	9.013	8.826	0.187	0.00%	2.07%

MWh Offtake was forecasted using the average hourly consumption per consumer from the existing Cabul-an Island multiplied by the number of potential consumers and eight (8) hours of operational hours. For forecasting simulation, the growth rate used varies from 5% to 8%.



MWh Output was expected to grow at an average rate of 6% annually.



System Loss is expected to range from 1.75% to 2.38%.

System loss is anticipated to increase due to the rising demand on the island, which puts additional strain on the existing infrastructure. As more residents and businesses require electricity, the system may become less efficient, leading to higher overall losses. Furthermore, it is important to note that there are currently no non-technical losses reflected in the submission. This is primarily because BOHECO II has yet to implement a system for segregating its off-grid system losses. Without this segregation, it becomes challenging to accurately identify and address areas of non-technical loss, such as theft, billing inaccuracies, and administrative inefficiencies.

Power Supply

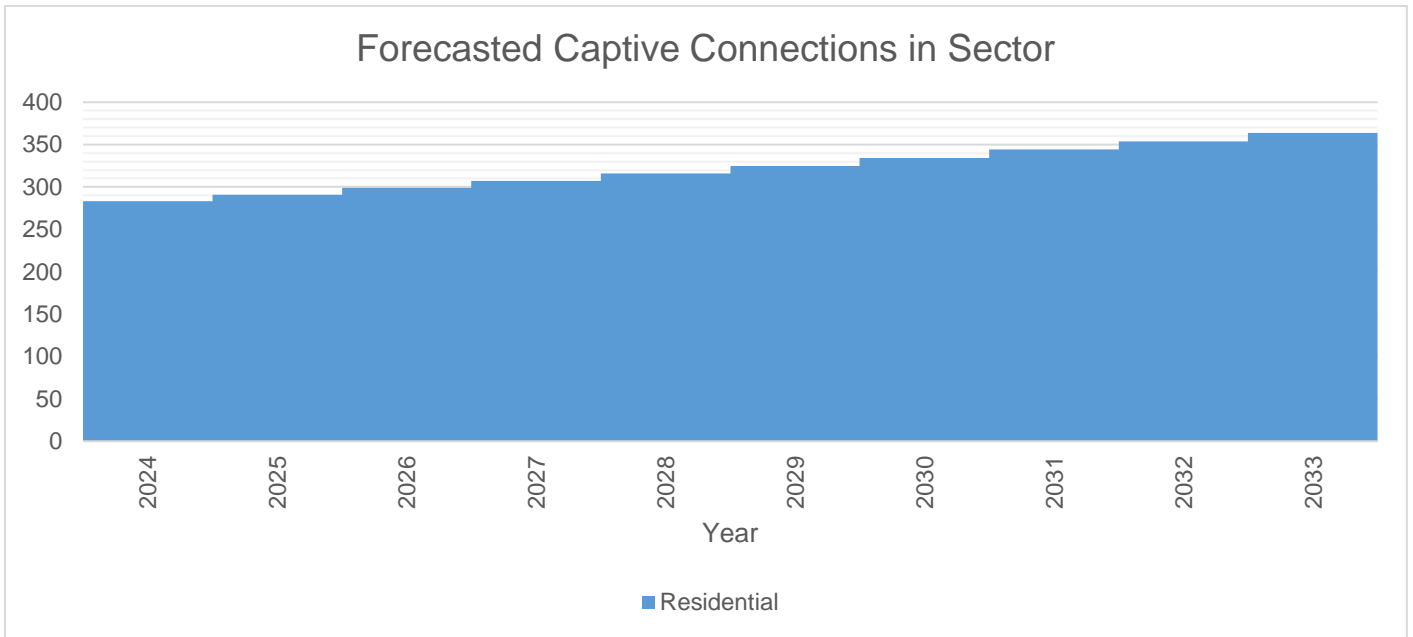
Case No.	Type	GenCo	Minimum MW	Minimum MWh/yr	PSA Start	PSA End
NPC-SPUG Gaus	Base	National Power Corporation	0.039	69.362	12/26/2023	12/25/2033

The Power Supply Agreement on the Sale of Electricity with the National Power Corporation (NPC) is pursuant to Section 70 of Republic Act No. 9136 and Section 1.a and Section 3.a of Rule 13 of the Implementing Rules and Regulations (IRR) of Republic Act No. 9136, which provides that the Small Power Utilities Group (SPUG) of NPC is responsible for providing power generation and its associated power delivery systems in areas that are not connected to the transmission system.

Through BOHECO II Board Resolution No. 87 Series of 2022 titled: “*A Resolution requesting for the inclusion of seven (7) new areas to the existing PSA between NPC and BOHECO II*”, the Island of Gaus, being one of the new seven areas, was granted supply contract effective 26 June 2022 to 25 December 2033. The initial energization target was scheduled on the 2nd quarter of 2022 but was delayed due to the challenge NPC is facing on securing a Certificate of Compliance (COC) from the Energy Regulatory Commission (ERC). The distribution lines are ready for energization.

The contract was then renewed for a ten-year period (December 26, 2023 – December 25, 2033) without the energization of the island, reflecting the prevailing challenges in obtaining the required regulatory approvals.

Captive Customer Connections



The number of Residential connections is expected to grow at a rate of 3% annually. Said customer class accounts for 100% of the total consumption.